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SEQUENCE LISTING

<110> Beraud, Christophe

<120> Novel motor proteins and methods for
their use

<130> 1044

<140> US 09/597,292

<141> 2000-06-20

<150> US 09/295,612

<151> 1999-04-20

<160> 8

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1115

<212> DNA

<213> Human

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 275 280 285
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 290 295 300
 Gly Lys Val Val Asp Ala Leu Asn Gln Gly Leu Pro Arg Val Pro Tyr
 305 310 315 320
 Arg Asp Ser Lys Leu Thr Arg Leu Leu Gln Asp Ser Leu Gly Gly Ser
 325 330 335
 Ala His Ser Ile Leu Ile Ala Asn Ile Ala Pro Glu Arg Arg Phe Tyr
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 Pro Cys Val Arg Gly Met Asp Ser Cys Ser Leu Glu Ile Ala Asn Trp
 65 70 75 80
 Arg Asn His Gln Glu Thr Leu Lys Tyr Gln Phe Asp Ala Phe Tyr Gly
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 Glu Arg Ser Thr Gln Gln Asp Ile Tyr Ala Gly Ser Val Gln Pro Ile
 100 105 110
 Leu Arg His Leu Leu Glu Gly Gln Asn Ala Ser Val Leu Ala Tyr Gly
 115 120 125
 Pro Thr Gly Ala Gly Lys Thr His Thr Met Leu Gly Ser Pro Glu Gln
 130 135 140
 Pro Gly Val Ile Pro Arg Ala Leu Met Asp Leu Leu Gln Leu Thr Arg
 145 150 155 160
 Glu Glu Gly Ala Glu Gly Arg Pro Trp Ala Leu Ser Val Thr Met Ser
 165 170 175
 Tyr Leu Glu Ile Tyr Gln Glu Lys Val Leu Asp Leu Leu Asp Pro Ala
 180 185 190
 Ser Gly Asp Leu Val Ile Arg Glu Asp Cys Arg Gly Asn Ile Leu Ile

195 200 205
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 225 230 235 240
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 245 250 255
 Gln Arg Glu Arg Leu Ala Pro Phe Arg Gln Arg Glu Gly Lys Leu Tyr
 260 265 270
 Leu Ile Asp Leu Ala Gly Ser Glu Asp Asn Arg Arg Thr Gly Asn Lys
 275 280 285
 Gly Leu Arg Leu Lys Glu Ser Gly Ala Ile Asn Thr Ser Leu Phe Val
 290 295 300
 Leu Gly Lys Val Val Asp Ala Leu Asn Gln Gly Leu Pro Arg Val Pro
 305 310 315 320
 Tyr Arg Asp Ser Lys Leu Thr Arg Leu Leu Gln Asp Ser Leu Gly Gly
 325 330 335
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 Tyr Leu Asp Thr Val Ser Ala Leu Asn Phe Ala Ala Arg Ser Lys Glu
 355 360 365
 Val Ile Asn Arg Pro Phe Thr Asn Glu Ser Leu Gln Pro His Ala Leu
 370 375 380
 Gly Pro Val Lys Leu Ser Gln Lys Glu Leu Leu Gly Pro Pro Glu Ala
 385 390 395 400
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 405 410 415
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 420 425 430
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 450 455 460
 Pro Lys Arg Glu Arg Met Val Leu Met Lys Thr Val Glu Glu Lys Asp
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 65 70 75 80
 Ala Gly Ser Val Gln Pro Ile Leu Arg His Leu Leu Glu Gly Gln Asn
 85 90 95
 Ala Ser Val Leu Ala Tyr Gly Pro Thr Gly Ala Gly Lys Thr His Thr
 100 105 110
 Met Leu Gly Ser Pro Glu Gln Pro Gly Val Ile Pro Arg Ala Leu Met
 115 120 125
 Asp Leu Leu Gln Leu Thr Arg Glu Glu Gly Ala Glu Gly Arg Pro Trp
 130 135 140
 Ala Leu Ser Val Thr Met Ser Tyr Leu Glu Ile Tyr Gln Glu Lys Val
 145 150 155 160
 Leu Asp Leu Leu Asp Pro Ala Ser Gly Asp Leu Val Ile Arg Glu Asp
 165 170 175
 Cys Arg Gly Asn Ile Leu Ile Pro Gly Leu Ser Gln Lys Pro Ile Ser
 180 185 190
 Ser Phe Ala Asp Phe Glu Arg His Phe Leu Pro Ala Ser Arg Asn Arg
 195 200 205
 Thr Val Gly Ala Thr Arg Leu Asn Gln Arg Ser Ser Arg Ser His Ala
 210 215 220
 Val Leu Leu Val Lys Val Asp Gln Arg Glu Arg Leu Ala Pro Phe Arg
 225 230 235 240
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 245 250 255
 Asn Arg Arg Thr Gly Asn Lys Gly Leu Arg Leu Lys Glu Ser Gly Ala
 260 265 270
 Ile Asn Thr Ser Leu Phe Val Leu Gly Lys Val Val Asp Ala Leu Asn
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 Gln Gly Leu Pro Arg Val Pro Tyr Arg Ser Lys Leu Thr Arg Leu
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 Leu Gln Asp Ser Leu Gly Gly Ser Ala His Ser Ile Leu Ile Ala Asn

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 35 40 45
 Ser Leu Glu Ile Ala Asn Trp Arg Asn His Gln Glu Thr Leu Lys Tyr
 50 55 60
 Gln Phe Asp Ala Phe Tyr Gly Glu Arg Ser Thr Gln Gln Asp Ile Tyr
 65 70 75 80
 Ala Gly Ser Val Gln Pro Ile Leu Arg His Leu Leu Glu Gly Gln Asn

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Met Leu Gly Ser Pro Glu Gln Pro Gly Val Ile Pro Arg Ala Leu Met		
115	120	125
Asp Leu Leu Gln Leu Thr Arg Glu Glu Gly Ala Glu Gly Arg Pro Trp		
130	135	140
Ala Leu Ser Val Thr Met Ser Tyr Leu Glu Ile Tyr Gln Glu Lys Val		
145	150	155
Leu Asp Leu Leu Asp Pro Ala Ser Gly Asp Leu Val Ile Arg Glu Asp		
165	170	175
Cys Arg Gly Asn Ile Leu Ile Pro Gly Leu Ser Gln Lys Pro Ile Ser		
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Ser Phe Ala Asp Phe Glu Arg His Phe Leu Pro Ala Ser Arg Asn Arg		
195	200	205
Thr Val Gly Ala Thr Arg Leu Asn Gln Arg Ser Ser Arg Ser His Ala		
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225	230	235
Gln Arg Glu Gly Lys Leu Tyr Leu Ile Asp Leu Ala Gly Ser Glu Asp		
245	250	255
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260	265	270
Ile Asn Thr Ser Leu Phe Val Leu Gly Lys Val Val Asp Ala Leu Asn		
275	280	285
Gln Gly Leu Pro Arg Val Pro Tyr Arg Asp Ser Lys Leu Thr Arg Leu		
290	295	300
Leu Gln Asp Ser Leu Gly Gly Ser Ala His Ser Ile Leu Ile Ala Asn		
305	310	315
Ile Ala Pro Glu Arg Arg Phe Tyr Leu Asp Thr Val Ser Ala Leu Asn		
325	330	335
Phe Ala Ala Arg Ser Lys Glu Val Ile Asn Arg Pro Phe Thr Asn Glu		
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Ser Leu Gln Pro His Ala Leu Gly Pro Val Lys Leu Ser Gln Lys Glu		
355	360	365
Leu Leu Gly Pro Pro Glu Ala Lys Arg Ala Arg Gly Pro Glu Glu Glu		
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Glu Ile Gly Ser Pro Glu Pro Met Ala Ala Pro Ala Ser Ala Ser Gln		
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Lys Leu Ser Pro Leu Gln Lys Leu Ser Ser Met Asp Pro Ala Met Leu		
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Glu Arg Leu Leu Ser Leu Asp Arg Leu Leu Ala Ser Gln Gly Ser Gln		
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Gly Ala Pro Leu Leu Ser Thr Pro Lys Arg Glu Arg Met Val Leu Met		
435	440	445
Lys Thr Val Glu Glu Lys Asp Leu Glu Ile Glu Arg Leu Lys Thr Lys		
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Gln Lys Glu Leu Glu Ala Lys Met Leu Ala Gln Lys Ala Glu Glu Lys		
465	470	475
Glu Asn His Cys Pro Thr Met		480
485		